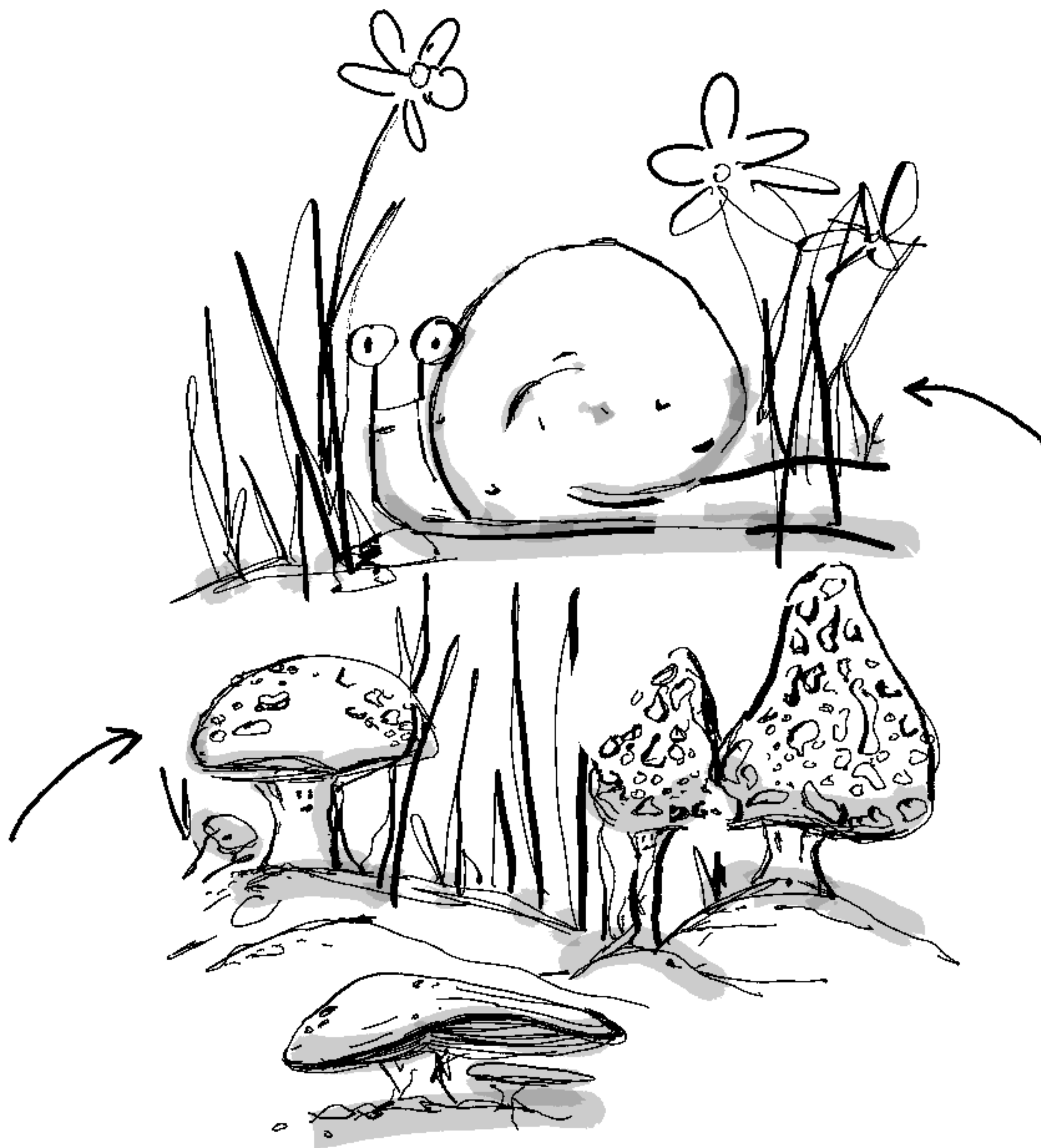


# HOW TO NAVIGATE A COMPLEX ORGANIZATION

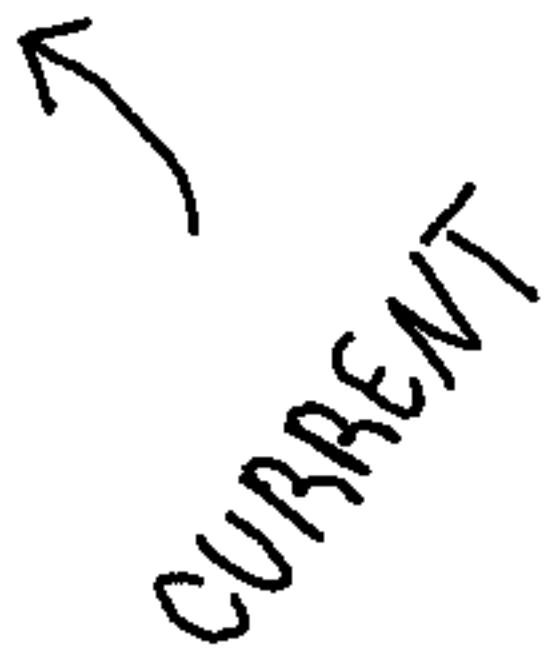
A VISUAL GUIDE

**DREN GOLAN**



**ALEX PRUKS**

# PREVIOUS NAMES

- 1 HOW TO BUILD  
AN ADAPTIVE  
ORGANIZATION
  - 2 HOW TO CHANGE  
A COMPLEX  
ORGANIZATION
  - 3 HOW TO NAVIGATE  
A COMPLEX  
ORGANIZATION
  - 4 ?
- 
- CURRENT

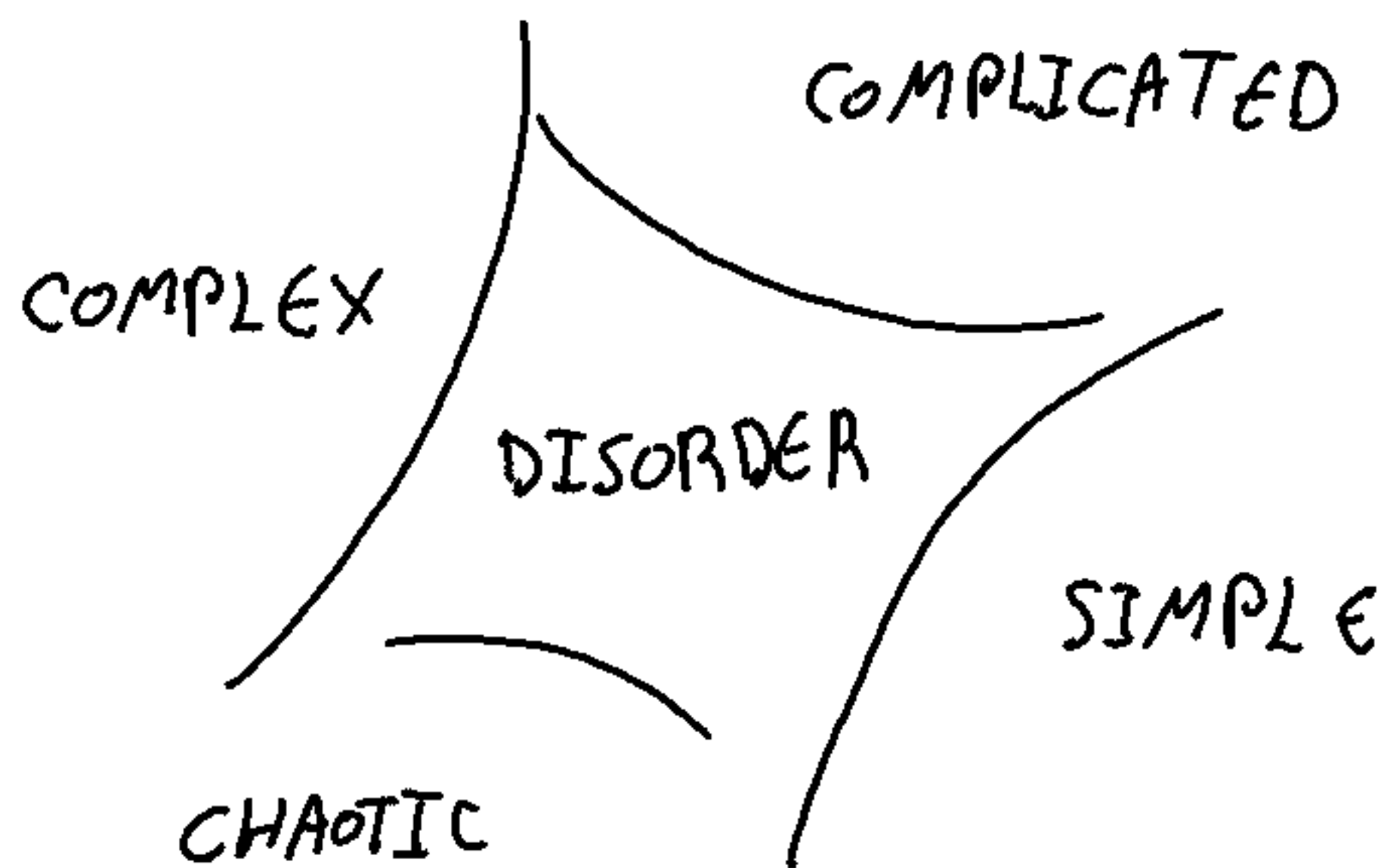
# WHAT WILL YOU LEARN?

- HOW TO NAVIGATE UNCERTAINTY USING CYNETIC FRAMEWORK
- UNDERSTAND WHAT A COMPLEX SYSTEM IS
- RECOGNIZE THE LEVERAGES IN A SYSTEM
- RECOGNIZE THE TRAPS IN A SYSTEM AND HOW TO AVOID THEM

# CYNEFIN

A FRAMEWORK FOR NAVIGATING  
UNCERTAINTY

UNPREDICTABLE WORLD



PREDICTABLE WORLD

DAVE SNOWDEN

# Complex

Probe - Sense - Respond

## Emergent Practice

Enabling Constraints

↓  
A/B  
TEST

DISARM  
CONFLICT

LEADING  
PEOPLE

INCREASE  
INNOVATION

PARENTING

# Complicated

Sense - Analyse - Respond

## Good Practice

Governing Constraints

BUILD CAR

PAY TAXES

Disorder

# Chaotic

Act - Sense - Respond

## Novel Practice

No effective Constraints

↓  
ROLL BACK

FIRE!

PRODUCTION  
SERVERS  
ARE DOWN

# Simple

Sense - Categorise - Respond

## Best Practice

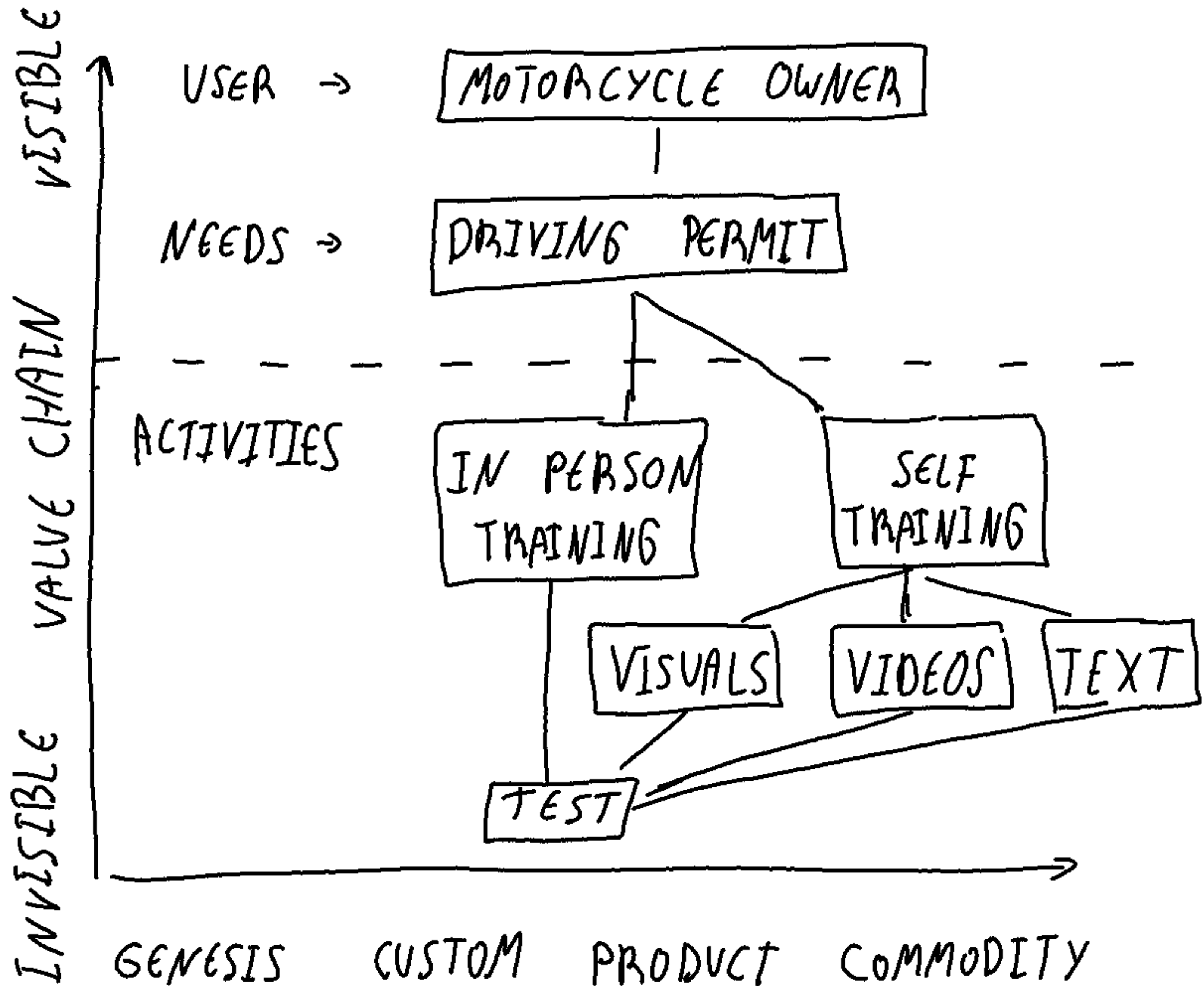
Fixed Constraints

CHECKLIST

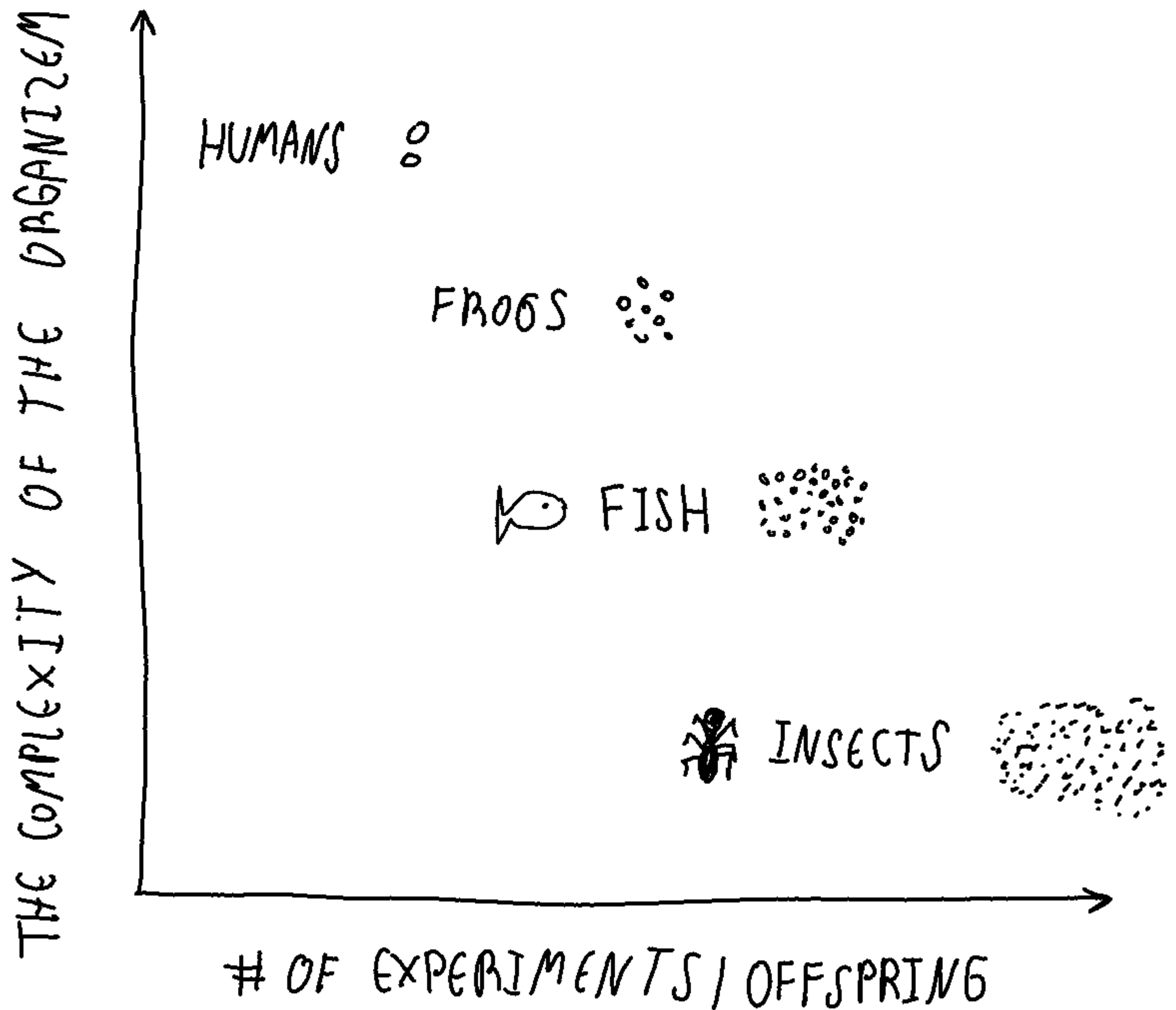
CHARGE  
PHONE

# WARDLEY MAPS

TOPOGRAPHICAL INTELLIGENCE IN BUSINESS



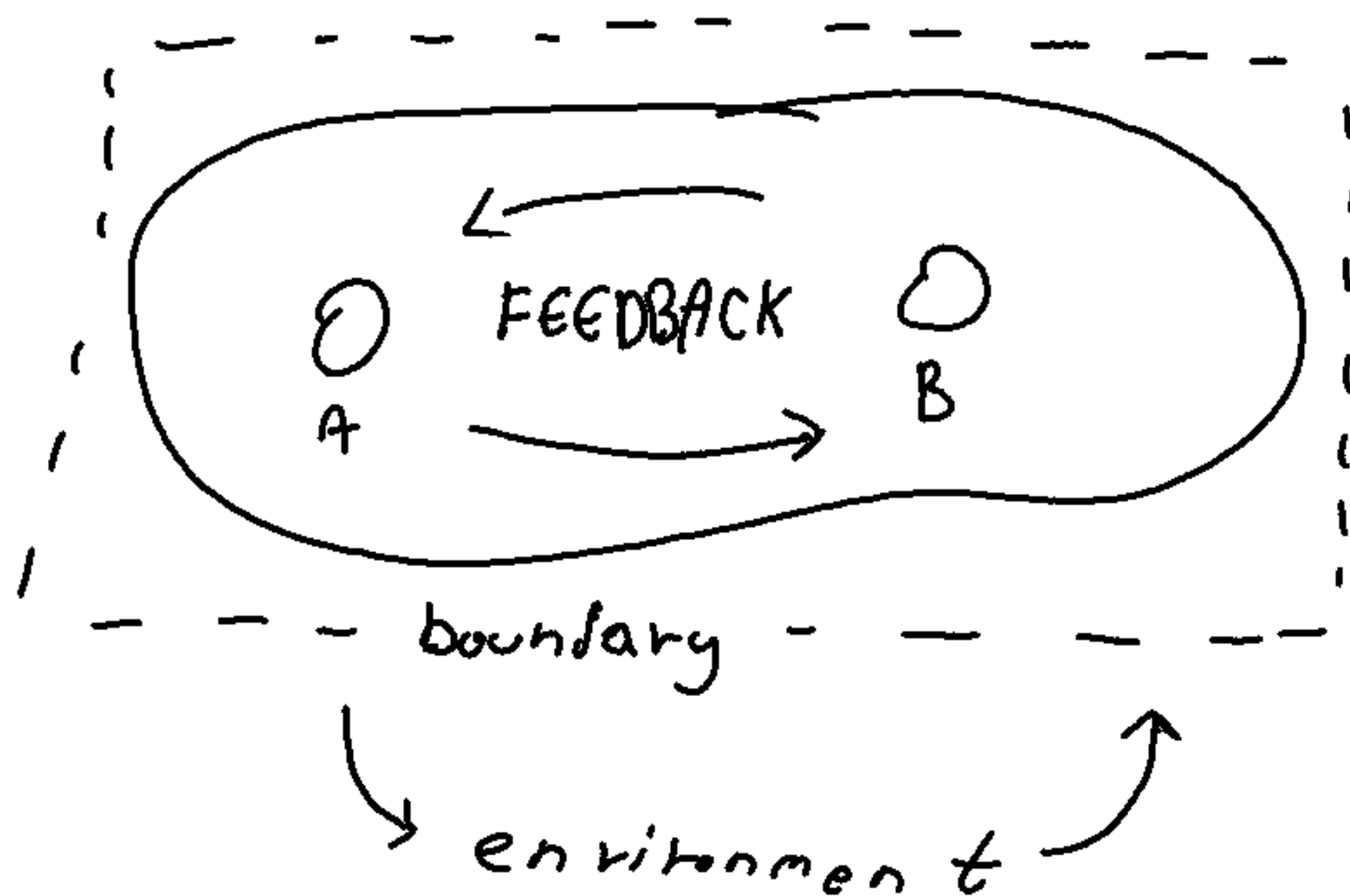
# HOW MANY EXPERIMENTS



MAKING THINGS WORK

# SYSTEM

"A SET OF THINGS WORKING TOGETHER  
AS PART OF A MECHANISM OR AN  
INTERCONNECTING NETWORK"



WIKIPEDIA



# SYSTEM THINKING & MANAGEMENT SCIENCE

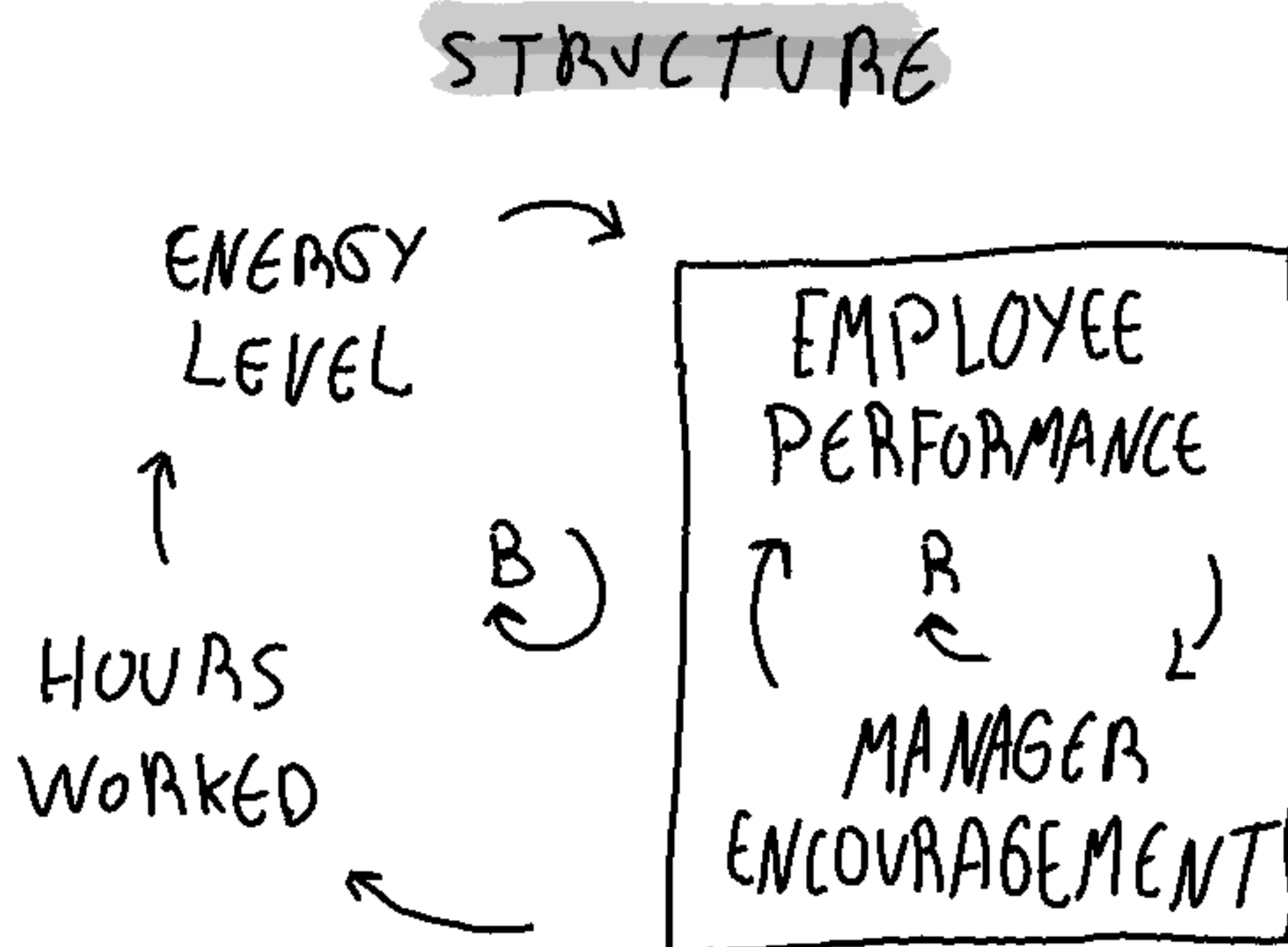
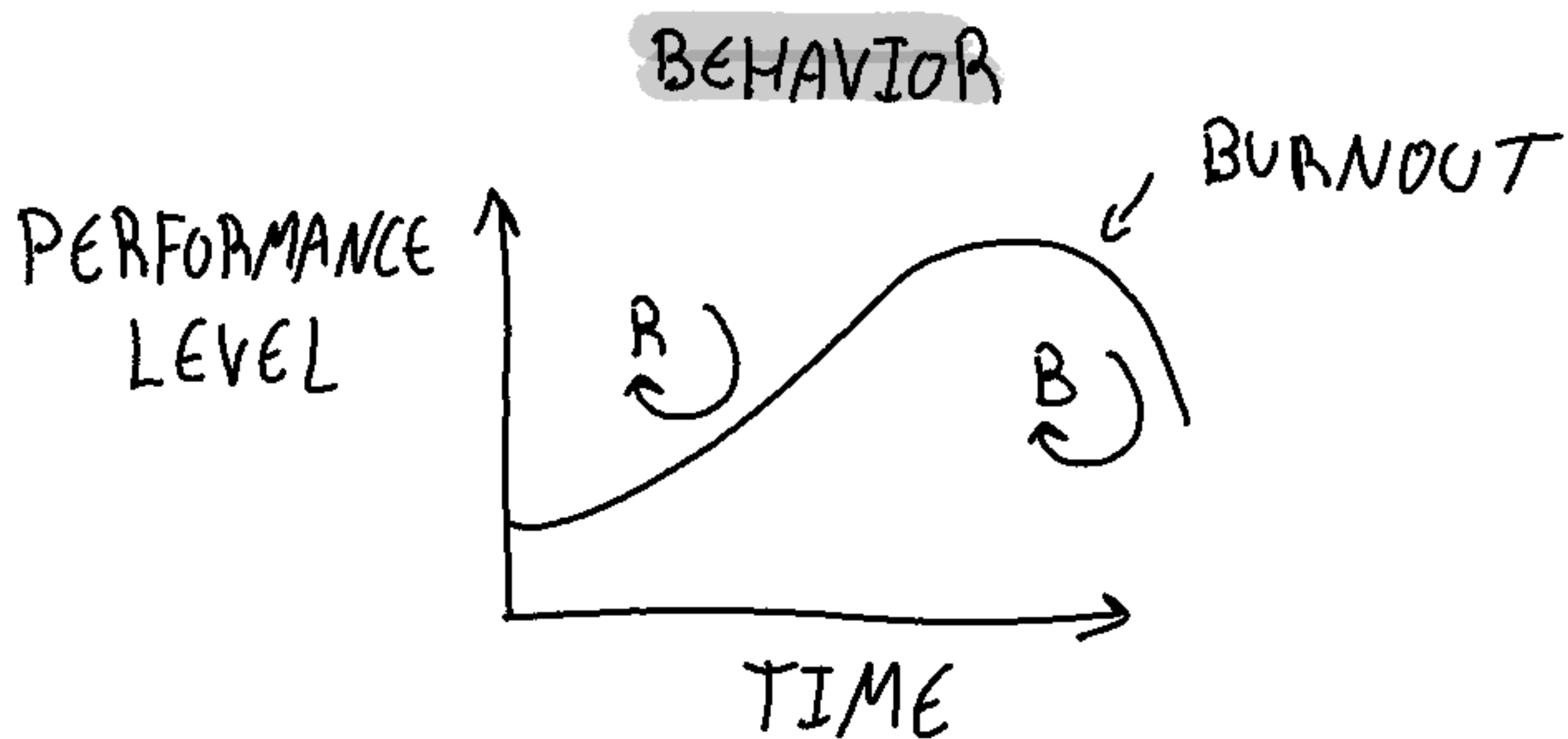
SYSTEM TYPE	PART	WHOLE
MECHANICAL	X	X
LIVING	X	✓
SOCIAL	✓	✓
ENVIRONMENTAL	✓	X

✓ - FREE WILL / AGENCY

X - NO FREE WILL

RUSSEL L. ACKOFF

# FEEDBACK LOOPS



# RESILIENCY

## BLUEFIN TUNA

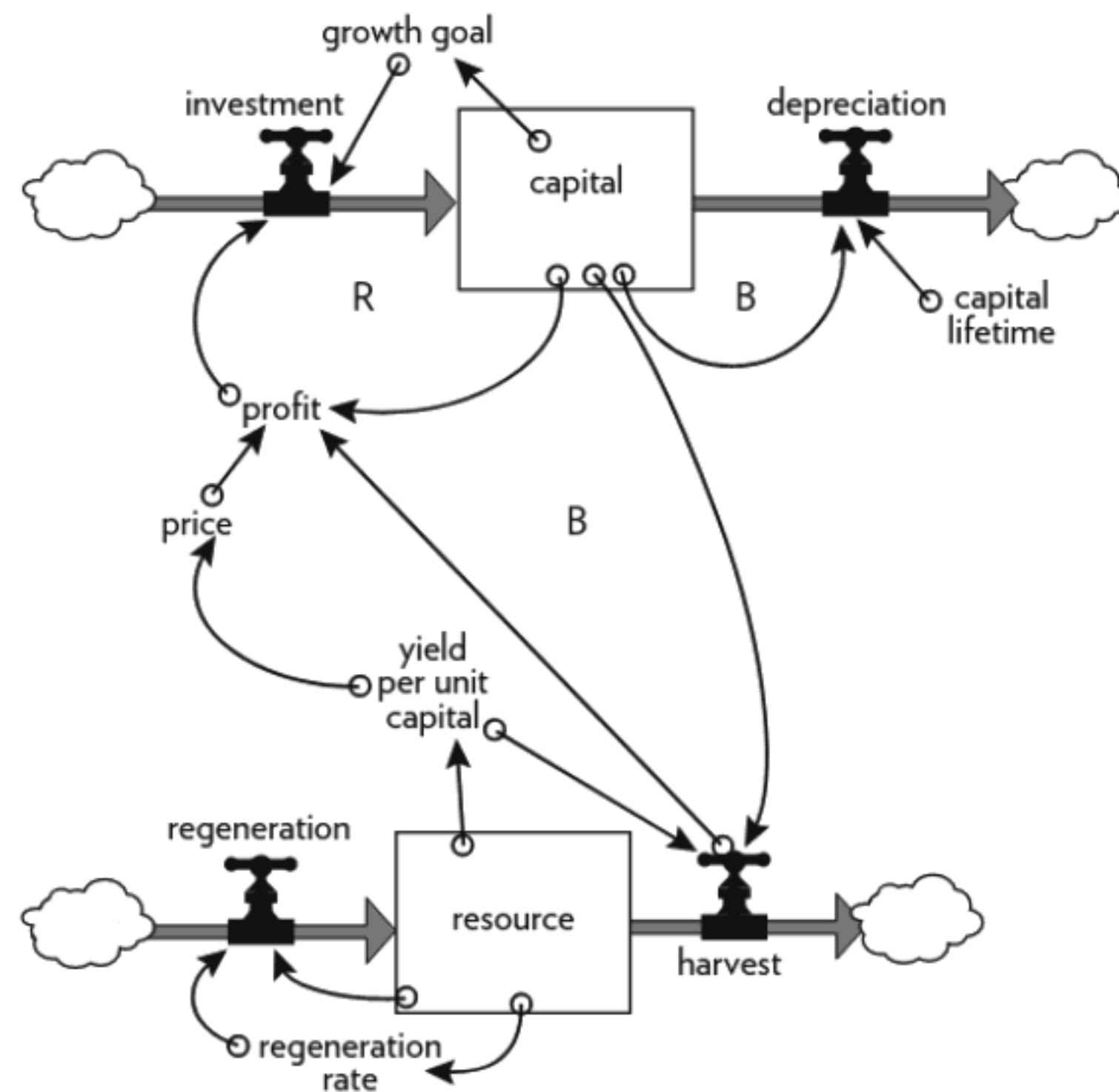


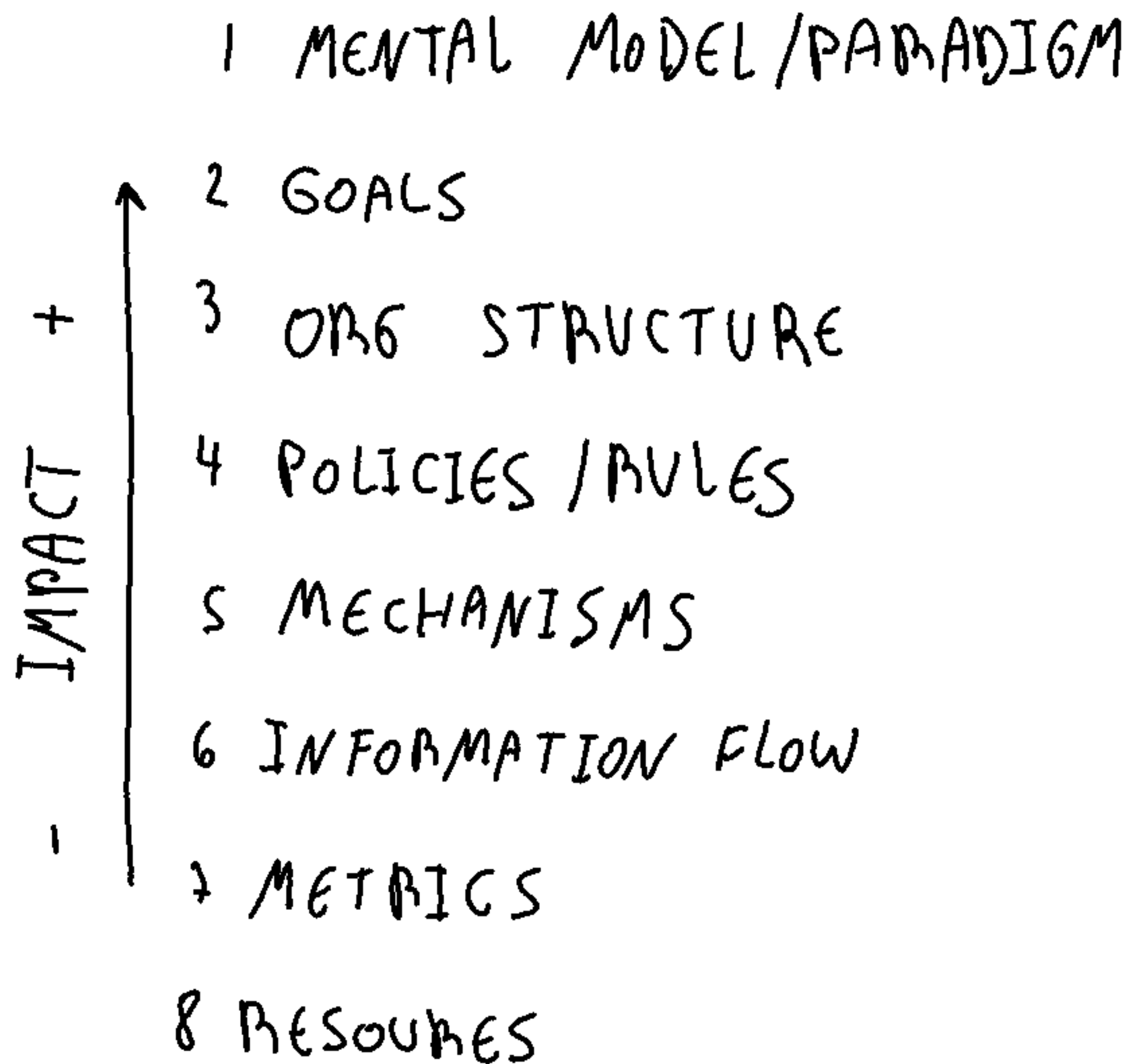
Figure 42. Economic capital with its reinforcing growth loop constrained by a renewable resource.

## CAUSES OF NON SUSTAINABLE SYSTEM

- MENTAL MODEL / GOALS (GROWTH)
- TECHNOLOGY (SONAR)
- MARKETS (PRICES VISIBLE)
- GOVERNMENT (HELP FISHERIES)

## THINKING IN SYSTEMS

# LEVERAGES



THINKING IN SYSTEMS

# TRAP 1

POLICY RESISTANCE  
(FIXES THAT FAIL)

## EXAMPLES:

ROMANIA, WARS ON DRUGS, UNSUPPORTED LIBS

## THE WAY OUT:

LET GO, CHANGE GOAL

THINKING IN SYSTEMS

# TRAP 2

TRAGEDY OF THE COMMONS

## EXAMPLES:

FISH, FOSSIL FUELS, POPULATION GROWTH

## THE WAY OUT:

EDUCATE, DIVIDE THE SHARED RESOURCE,

REGULATE THE COMMON

THINKING IN SYSTEMS

# TRAP 3

DRIFT TO LOW PERFORMANCE

## EXAMPLES:

FALLING MARKET SHARE, DIRTIER AIR, GAINING  
FAT IN SPITE OF DIETING

## THE WAY OUT:

ADJUST STANDARDS BASED ON BEST  
PERFORMANCE

THINKING IN SYSTEMS

# TRAP 4

ESCALATION

## EXAMPLES:

ARM RACE, ADS CAMPAIGN

## THE WAY OUT:

REFUSE TO COMPETE, BUILD A SYSTEM  
WITH BALANCING LOOPS TO CONTROL THE  
ESCALATION

THINKING IN SYSTEMS



# TRAP 5

SUCCESS TO THE SUCCESSFUL

## EXAMPLES:

EXTINCTION OF SPECIES, NUMBER OF CAR BRANDS AND NEWSPAPERS

## THE WAY OUT:

POLICIES THAT LEVEL THE PLAYING FIELD  
(TAX, UNIONS, EQUAL HEALTHCARE & EDUCATION)

THINKING IN SYSTEMS

# TRAP 6

ADDICTION

## EXAMPLES:

FAMILIES DELEGATING CARE FOR ELDERLY,  
RELYING ON VACCINE & MEDICATION

## THE WAY OUT:

HELP A SYSTEM TO RESTORE ITS ABILITY  
TO SOLVE ITS PROBLEMS, THEN REMOVE YOURSELF

THINKING IN SYSTEMS

# TRAP 7

RULE BEATING

## EXAMPLES:

SPENDING AT THE END OF THE YEAR, POISON  
ENDANGERED SPECIES

## THE WAY OUT:

REDESIGN RULES TO TURN THE SELF  
ORGANIZATION OF THE SYSTEM IN THE  
DIRECTION OF ACHIEVING THE PURPOSE  
OF THE RULES

THINKING IN SYSTEMS

# TRAP 8

SEEKING THE WRONG GOAL

## EXAMPLES:

GDP DOES NOT COUNT FOR WELFARE, EQUITY,  
JUSTICE. MEASURING GOOD EDUCATION BY MONEY SPENT

## THE WAY OUT:

SET GOALS THAT REFLECT THE REAL WELFARE  
OF THE SYSTEM

THINKING IN SYSTEMS

# RESOURCES

## Books:

THINKING IN SYSTEMS

MAKING THINGS WORK

GOOD STRATEGY BAD STRATEGY

TEAM OF TEAMS

AGENDASHIFT

TURN THE SHIP AROUND

CONNECT: BUILDING EXCEPTIONAL RELATIONSHIPS

NONVIOLENT COMMUNICATION

## OTHER:

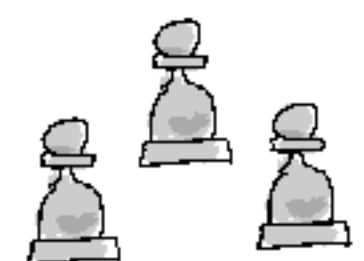
WARDLEY MAPS

CYNEFIN

CLEAN LANGUAGE

OPEN.GITHUB.IO

x chess



✓ gardening

